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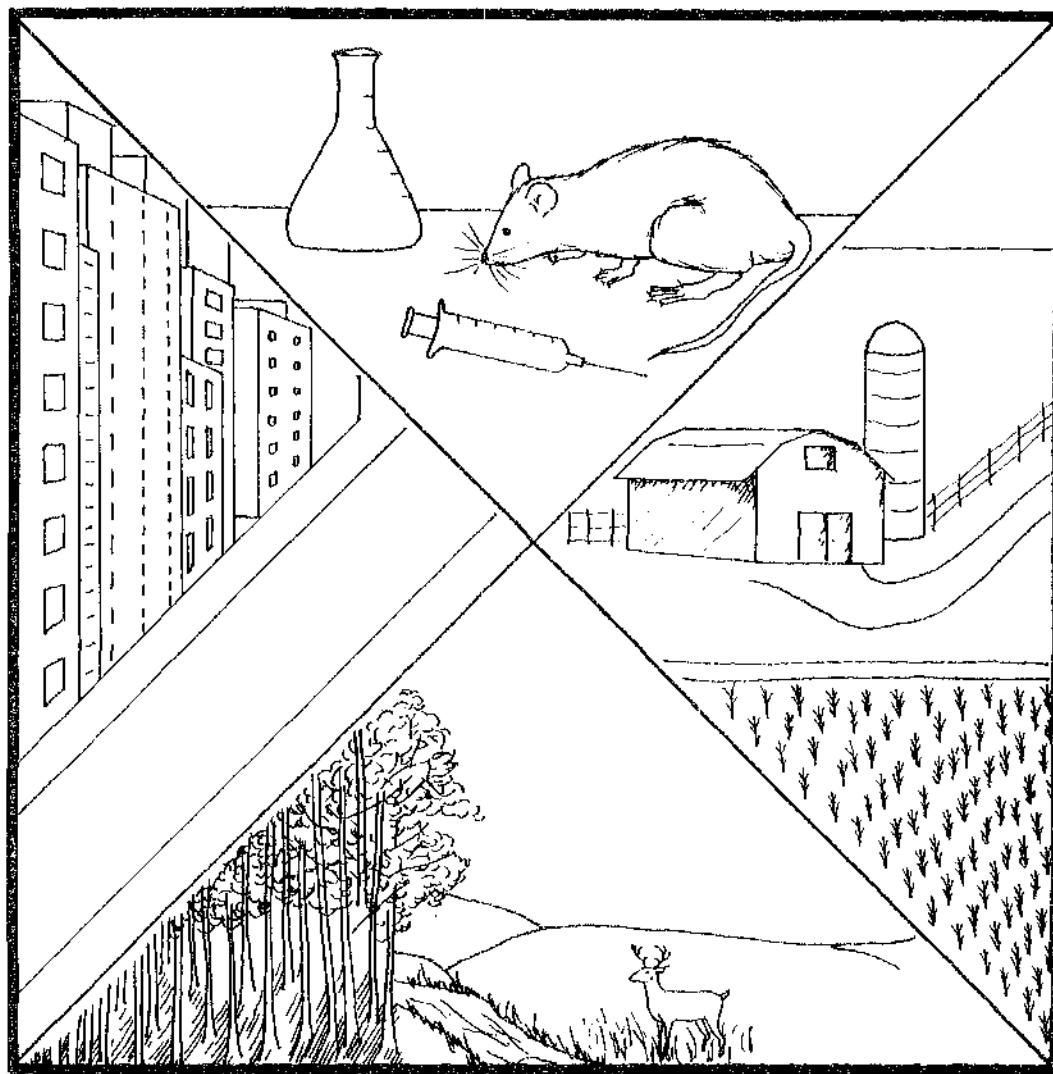
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# Selected Bibliography of the Phenoxy Herbicides

## III.

### Toxicological Studies in Animals



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SELECTED BIBLIOGRAPHY OF THE

PHENOXY HERBICIDES

III. Toxicological Studies in Animals

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### Introduction

This is the third publication in a series of bibliographies on the phenoxy herbicides. The first two publications dealt with the fate of the phenoxy herbicides in the environment and the substituted dibenz-p-dioxins. There is much public concern about the adverse effects that the use of 2,4,5-T, 2,4-D, and other phenoxy herbicides may pose to man and the rest of the fauna. Accordingly, the third part of the series deals with the subject of toxicity.

References are listed in alphabetical order according to author's name. A subject numerical index is provided, consisting of six sections each identified by a Roman numeral.

Section I comprises research papers dealing with the effect of each herbicide in animals. Scientific names are listed alphabetically under their respective classes. These are listed in order of complexity in the animal kingdom. A separate list of the classes covered, together with their respective phylum, is provided for information purposes.

Section II contains other technical literature, informative in nature but not of research type.

Sections III and IV, respectively, deal with gubernatorial and legal actions pertaining to the toxic aspects of the use of the phenoxy herbicides.

Section V consists of reviews dealing with the information from the preceding sections. Section VI includes nontechnical information and research papers that mention common names of organisms without their scientific names. Some papers in foreign languages, where animal species were not identified, are also covered in this section.

Each Arabic numeral in the subject index identifies a reference in

the author's alphabetical list. For references published in languages other than English, the abbreviated form of the particular language is enclosed in parentheses after the title. A list of the abbreviated and complete names of languages and a list of the abbreviated and complete names of periodicals, together with their countries and cities of origin, are also provided. If English abstracts for the references are available, the abstract sources are included after the listed reference.

Classes of Organisms

<u>Class</u>	<u>Phylum</u>
<i>TURBELLARIA</i> (free living flat worms)	Platyhelminthes
<i>TREMATODA</i> (flukes)	Platyhelminthes
<i>CESTOIDEA</i> (tapeworms)	Platyhelminthes
<i>ROTIFERA</i> (wheel animacules)	Aschelminthes
<i>NEMATODA</i> (roundworms)	Aschelminthes
<i>GASTROPODA</i> (univalve mollusks)	Mollusca
<i>PELECYPODA</i> (bivalve mollusks)	Mollusca
<i>OLIGOCHAETA</i> (earthworms)	Annelida
<i>ARACHNIDA</i> (spiders, scorpions, mites, ticks, etc.)	Arthropoda
<i>CRUSTACEA</i> (lobsters, crabs, water fleas, barnacles, etc.)	Arthropoda
<i>INSECTA</i> (insects)	Arthropoda
<i>OSTEICHTHYES</i> (bony fishes)	Chordata
<i>AMPHIBIA</i> (amphibians)	Chordata
<i>REPTILIA</i> (reptiles)	Chordata
<i>AVES</i> (birds)	Chordata
<i>MAMMALIA</i> (mammals)	Chordata

List of Abbreviated Sources

Acta Haematol.	Acta Haematologica (Basel, Switzerland)
Acta Neurol. Scand.	Acta Neurologica Scandinavia (Copenhagen, Denmark)
Acta Neuropathol.	Acta Neuropathologica (Berlin, Germany)
Acta Pharmacol. Toxicol.	Acta Pharmacologica et Toxicologica (Copenhagen, Denmark)
Acta Physiol.	Acta Physiologica (Budapest, Hungary)
Acta Vet. Scand.	Acta Veterinaria Scandinavia (Copenhagen, Denmark)
Advan. Chem. Ser.	Advances in Chemistry Series (Washington, D.C.)
Advan. Exp. Med. Biol.	Advances in Experimental Medicine and Biology (New York, N.Y.)
Agric. Aviat.	Agricultural Aviation (The Hague, Netherlands)
Agric. Chem.	Agricultural Chemicals (Caldwell, N.J.)
Agric. Res.	Agricultural Research (Washington, D.C.)
Agrichem. Age	Agrichemical Age (Sausalito, Calif.)
Agriculture	Agriculture (London, England)
Agrochemia	Agrochemia (Bratislava, Czechoslovakia)
Akad. Nauk B. SSR	Akademiya Nauk Belorusskoi SSR (Minsk, USSR)
Allg. Forstztg.	Allgemeine Forstzeitung (Vienna, Austria)
All. Forst. Jagdztg.	Allgemeine Forst- und Jagdzeitung (Frankfurt am Main, Germany)
Am. Bee J.	American Bee Journal (Hamilton, Ill.)
Am. Inst. Chem. Eng., Symp. Ser.	American Institute of Chemical Engineering, Symposium Series (New York, N.Y.)
Am. J. Pharm.	American Journal of Pharmacy and the Sciences Supporting Public Health (Philadelphia, Pa.)
Am. J. Physiol.	American Journal of Physiology (Baltimore, Md.)
Am. J. Psychiatry	American Journal of Psychiatry (Washington, D.C.)
Am. J. Vet. Res.	American Journal of Veterinary Re- search (Chicago, Ill.)

Am. Zool.	American Zoologist (Charlottesville, Va.)
Ambio	Ambio (Stockholm, Sweden)
Anat. Rec.	Anatomical Record (Washington, D.C.)
Anim. Prod.	Animal Production (Edinburg, Scotland)
Ann. Appl. Biol.	Annals of Applied Biology (London, England)
Ann. Biol. Anim., Biochim. Biophys.	Annales de Biologie Animale, Biochimie, Biophysique (Paris, France)
Ann. Gembloux	Annales de Gembloux (Brussels, Belgium)
Ann. Inst. Phytopathol. Benaki	Annales de l'Institut Phytopathologique Benaki (Athens, Greece)
Ann. N.Y. Acad. Sci.	Annals of the New York Academy of Sci- ence (New York, N.Y.)
Ann. Zool.-Ecol. Anim.	Annales de Zoologie-Ecologie Animale (Paris, France)
Anz. Schaedlingskd., Pflanz. Umweltschutz	Anzeiger fuer Schaedlingskunde, Pflanzen und Umweltschutz (Berlin, Germany)
Arch. Dermatol.	Archives of Dermatology (Chicago, Ill.)
Arch. Environ. Health	Archives of Environmental Health (Chicago, Ill.)
Arch. Exp. Pathol. Pharmacol.	Archives of Experimental Pathology and Pharmacology (Berlin, Germany)
Arch. Ind. Hyg. Occup. Med.	Archives of Industrial Hygiene and Occupational Medicine (Chicago, Ill.)
Arch. Intern. Med.	Archives of Internal Medicine (Chicago, Ill.)
Arch. Int. Pharmacodyn. Ther.	Archives Internationales de Pharma- codynamie et de Therapie (Ghent, Belgium)
Arch. Klin. Exp. Dermatol.	Archiv fuer Klinische und Experimen- telle Dermatologie (Berlin, Germany)
Arch. Mal. Prof., Hyg. Toxicol. Ind.	Archives des Maladies Professionnelles, Hygiene et Toxicologie Industrielles (Paris, France)
Arch. Neurol.	Archives of Neurology (Chicago, Ill.)
Arch. Pathol.	Archives of Pathology (Chicago, Ill.)

Arch. Pflanzenschutz	Archiv fuer Pflanzenschutz (Berlin, Germany)
Arch. Toxikol.	Archiv fuer Toxikologie (Berlin, Germany)
Aust. N.Z. J. Med.	Australian and New Zealand Journal of Medicine (Sydney, Australia)
Aust. Vet. J.	Australian Veterinary Journal (Perkville, Australia)
Azerb. Med. Zh.	Azerbaidzhanskii Meditsinskii Zhurnal (Baku, USSR)
Ber. Landwirtsch.	Berichte ueber Landwirtschaft (Berlin, Germany)
Biochem. J.	Biochemical Journal, The (London, England)
Biochim. Biophys. Acta	Biochimica et Biophysica Acta (Amsterdam, Netherlands)
Biol. Abstr.	Biological Abstracts (Philadelphia, Pa.)
Biol. Conserv.	Biological Conservation (Barking, England)
Biol. Rundsch.	Biologische Rundschau (Jena, E. Germany)
Biologico	Biologico (Sao Paulo, Brazil)
BioScience	BioScience (Washington, D.C.)
Bol. R. Soc. Esp. Hist. Nat.	Boletin de la Real Sociedad Espanola de Historia Natural (Madrid, Spain)
Bolsa Cer.	Bolsa de Cereales (Buenos Aires, Argentina)
Br. Ecol. Soc. Symp.	British Ecological Society Symposium (Swansea, England)
Br. J. Cancer	British Journal of Cancer (London, England)
Br. J. Ind. Med.	British Journal of Industrial Medicine (London, England)
Br. Med. J.	British Medical Journal (London, England)
Br. Poult. Sci.	British Poultry Science (Edinburgh, Scotland)
Bratisl. Lek. Listy	Bratislavské Lekarske Listy (Bratislava, Czechoslovakia)
Bull. Acad. Pol. Sci., Ser. Sci. Biol.	Bulletin de l'Academie Polonaise des Sciences, Serie des Sciences Biologiques (Warsaw, Poland)
Bull. Acad. Vet. Fr.	Bulletin de l'Academie Veterinaire de France (Paris, France)

Bull. Agric. Chem. Insp. Stn.	Bulletin of the Agricultural Chemicals Inspection Station (Tokyo, Japan)
Bull. Anc. Eleves Ec. Meun. ENSMIC	Bulletin des Anciens Eleves de l'Ecole de Meunerie ENSMIC (Paris, France)
Bull. Entomol. Res.	Bulletin of Entomological Research (London, England)
Bull. Environ. Contam. Toxicol.	Bulletin of Environmental Contamination and Toxicology (New York, N.Y.)
Bull. Soc. Zool. Fr.	Bulletin de la Societe Zoologique de France (Paris, France)
Byull. Eksp. Biol. Med.	Byulleten 'Eksperimental' noi Biologii i Meditsiny (Moscow, USSR)
C. R. Hebd. Seances Acad. Sci., Ser. D.	Comptes Rendus Hebdomadaires des Seances de l'Academie des Sciences, Serie D: Sciences Naturelles (Paris, France)
C. R. Seances Soc. Biol. Ses Fil.	Comptes Rendus des Seances de la Societe de Biologie et de Ses Filiales (Paris, France)
C. R. Soc. Biol.	Comptes Rendus des Seances de la Societe de Biologie et de Ses Filiales (Paris, France)
Calif. Farmer	California Farmer (San Francisco, Calif.)
Can. J. Comp. Med.	Canadian Journal of Comparative Medicine (Ottawa, Canada)
Can. J. Genet. Cytol.	Canadian Journal of Genetics and Cytol- ogy (Ottawa, Canada)
Can. J. Plant Sci.	Canadian Journal of Plant Science (Ottawa, Canada)
Can. J. Zool.	Canadian Journal of Zoology (Ottawa, Canada)
CAST	Council for Agricultural Science and Technology (Ames, Iowa)
Cesk. Dermatol.	Ceskoslovenska Dermatologie (Prague, Czechoslovakia)
Chem. Abstr.	Chemical Abstracts (Columbus, Ohio)
Chem.-Biol. Interact.	Chemico-Biological Interactions (Amsterdam, Netherlands)
Chem. Eng. News	Chemical and Engineering News (Washington, D.C.)
Chem. Senses Flavor	Chemical Senses and Flavor (Dordrecht, Netherlands)

Chem. Week	Chemical Week (New York, N.Y.)
Chemistry	Chemistry (Easton, Pa.)
Chemosphere	Chemosphere (Oxford, England)
Chesapeake Sci.	Chesapeake Science (Solomons Island, Md.)
Citrograph	Citrograph (Los Angeles, Calif.)
Clin. Obstet. Gynecol.	Clinical Obstetrics and Gynecology (Hagerstown, Md.)
Clin. Toxicol.	Clinical Toxicology (New York, N.Y.)
Coeur Med. Interne	Coeur et Medicine Interne (Paris, France)
Congr. Rec.	Congressional Record (Washington, D.C.)
Contrib. Ist. Rec. Agrar. Milan	Contributi, Istituto di Ricercae Agrarie, Milan (Milan, Italy)
Copeia	Copeia (Washington, D.C.)
Crit. Rev. Toxicol.	Critical Reviews in Toxicology (Cleveland, Ohio)
Crops Soils	Crops and Soils (Madison, Wis.)
Dermatologica	Dermatologica (Basel, Switzerland)
Diss. Abstr. Int.	Dissertation Abstracts International (Ann Arbor, Mich.)
Down Earth	Down to Earth (Midland, Mich.)
East Afr. Med. J.	East African Medical Journal (Nairobi, Kenya)
Ecology	Ecology (Durham, N.C.)
Econ. Med. Anim.	Economie et Medicine Animales (Paris, France)
Eksp. Vodn. Toksikol.	Eksperimental'naya Vodnaya Toksikol- ogiya (Riga, USSR)
Eksp. Vod. Toksikol., Mater. Vses. Simp.	Eksperimental'naya Vodnaya Toksikol- ogiya, Materialy Vsesoyuznogo Sim- poziuma (Riga, USSR)
Elelmiszervizsgalati Kozl.	Elelmiszervizsgalati Kozlemmyek (Budapest, Hungary)
Environ. Entomol.	Environmental Entomology (College Park, Md.)

Environ. Lett.	Environmental Letters (New York, N.Y.)
Environ. Pollut.	Environmental Pollution (Barking, England)
Environ. Qual. Saf.	Environmental Quality and Safety (Stuttgart, Germany)
Environ. Res.	Environmental Research (New York, N.Y.)
Environ. Sci. Technol.	Environmental Science and Technology (Washington, D.C.)
Environment	Environment (St. Louis, Mo.)
Experientia	Experientia (Basel, Switzerland)
Farm Chem.	Farm Chemicals (Willoughby, Ohio)
Farmakol. Toksikol. Moscow	Farmakologiya i Toksikologiya (Moscow) (Moscow, USSR)
Fed. Proc., Fed. Am. Soc. Exp. Biol.	Federation Proceedings, Federation of American Societies for Experimental Biology (Washington, D.C.)
Fed. Regist.	Federal Register (Washington, D.C.)
Fette, Seifen, Anstrichm.	Fette, Seifen, Anstrichmittel (Hamburg, W. Germany)
Field Lab.	Field and Laboratory (Dallas, Tex.)
Folia Haematol.	Folia Haematologica (Leipzig, E. Germany)
Folia Histochem. Cytochem.	Folia Histochemica et Cytochemica (Crakow, Poland)
Folia Med.	Folia Medica (Naples, Italy)
Food Cosmet. Toxicol.	Food and Cosmetics Toxicology (London, England)
Frontiers	Frontiers (Chicago, Ill.)
Gaz, Woda Tech. Sanit.	Gaz, Woda i Technika Sanitarna (Warsaw, Poland)
Gesunde Pflanz.	Gesunde Pflanzen (Frankfurt, W. Germany)
Gig. Sanit.	Gigiena i Sanitariya (Moscow, USSR)
Gig. Tr. Prof. Zabol.	Gigiena Truda i Professional'nye Zabolevaniya (Moscow, USSR)
Glean. Bee Cult.	Gleanings in Bee Culture (Medina, Ohio)
Health Aspects Pestic.	Health Aspects of Pesticides, Abstract Bulletin (Chamblee, Ga.)

Hereditas	Hereditas (Lund, Sweden)
Histochemie	Histochemie (Berlin, Germany)
HortScience	HortScience (St. Joseph, Mich.)
Hyac. Control J.	Hyacinth Control Journal (Fort Lauderdale, Fla.)
Hydrobiologia	Hydrobiologia (The Hague, Netherlands)
Ind. Med.	Industrial Medicine (Chicago, Ill.)
Ind. Res.	Industrial Research (Beverly Shores, Ind.)
Ind. Veg. Manage.	Industrial Vegetation Management (Dow Chemical Co., Midland, Mich.)
Indian J. Agric. Sci.	Indian Journal of Agricultural Sciences (New Delhi, India)
Inquinamento	Inquinamento (Milan, Italy)
Int. Chem. Eng.	International Chemical Engineering (New York, N.Y.)
Int. J. Environ. Stud.	International Journal of Environmental Studies (London, England)
Int. Pest Control	International Pest Control (London, England)
J. Agric. Food Chem.	Journal of Agriculture and Food Chemistry (Washington, D.C.)
J. Am. Ind. Hyg. Assoc.	Journal American Industrial Hygiene Association (Cincinnati, Ohio)
J. Am. Med. Assoc.	Journal of the American Medical Association (Chicago, Ill.)
J. Am. Vet. Med. Assoc.	Journal of the American Veterinary Medical Association (Chicago, Ill.)
J. Anim. Sci.	Journal of Animal Science (Champaign, Ill.)
J. Appl. Ecol.	Journal of Applied Ecology (Oxford, England)
J. Ariz. Acad. Sci.	Journal of the Arizona Academy of Science (Tempe, Ariz.)
J. Assoc. Off. Anal. Chem.	Journal of the Association of Official Analytical Chemists (Washington, D.C.)
J. Cell Biol.	Journal of Cell Biology (New York, N.Y.)

J. Econ. Entomol.	Journal of Economic Entomology (Baltimore, Md.)
J. Environ. Qual.	Journal of Environmental Quality (Madison, Wis.)
J. Fish. Res. Board Can.	Journal of the Fisheries Research Board of Canada (Ottawa, Ontario, Canada)
J. For.	Journal of Forestry (Washington, D.C.)
J. Hered.	Journal of Heredity, The (Washington, D.C.)
J. Ind. Hyg. Toxicol.	Journal of Industrial Hygiene and Toxi- cology (Cambridge, Mass.)
J. Inst. Sewage Purif.	Journal of the Institute of Sewage Puri- fication (London, England)
J. Int. Inst. Sugar Beet Res.	Journal of the International Institute for Sugar Beet Research (Tirlemont, Belgium)
J. Invertebr. Pathol.	Journal of Invertebrate Pathology (New York, N.Y.)
J. Iowa Med. Soc.	Journal of the Iowa Medical Society (Des Moines, Iowa)
J. Ky. Med. Assoc.	Journal of the Kentucky Medical Asso- ciation (Louisville, Ky.)
J. Nat. Cancer Inst.	Journal of the National Cancer Institute (Bethesda, Md.)
J. Range Manage.	Journal of Range Management (Denver, Colo.)
J. Reprod. Fertil.	Journal of Reproduction and Fertility (Oxford, England)
J. Theor. Biol.	Journal of Theoretical Biology (London, England)
J. Toxicol. Environ. Health	Journal of Toxicology and Environmental Health (Washington, D.C.)
J. Wash. Acad. Sci.	Journal of the Washington Academy of Sciences (Washington, D.C.)
J. Water Pollut. Control Fed.	Journal of the Water Pollution Control Federation (Washington, D.C.)
J. Wildl. Manage.	Journal of Wildlife Management (Washington, D.C.)
Jpn. J. Clin. Dermatol.	Japanese Journal of Clinical Dermatology (Tokyo, Japan)
Jpn. Pestic. Inf.	Japan Pesticide Information (Tokyo, Japan)

K. Lantbruksfoegsk. Statens Lantbruksfoers., Statens Husdjursfoers., Saertr. Foerhandsmedd.	Kungliga Lantbruksfoegskolan och Statens Lantbruksfoersoek, Statens Husdjursfoersoek, Saertryck och Foerhandsmeddelande (Uppsala, Sweden)
Kem.-Kemi	Kemica-Kemi (Helsinki, Finland)
Khim. Sel'sk. Khoz.	Khimiya v Selskom Khoziastive (Moscow, USSR)
Klin. Wochenschr.	Klinische Wochenschrift (Berlin, Germany)
Lakartidningen	Lakartidningen (Stockholm, Sweden)
Latv. PSR Zinat. Akad. Vestis	Latvijas PSR Zinatnu Akademijas Vestis (Riga, USSR)
Lesn. Khoz.	Lesnoe Khozyaistvo (Moscow, USSR)
Lille Med.	Lille Medical (Lille, France)
Limnol. Oceanogr.	Limnology and Oceanography (Lawrence, Kans.)
Magy. Allatorv. Lapja	Magyar Allatorvosok Lapja (Budapest, Hungary)
Med. Cut.	Medicina Cutanea (Barcelona, Spain)
Med. Lav.	Medicina del Lavoro (Milan, Italy)
Med. World News	Medical World News (New York, N.Y.)
Mich. Agric. Exp. Stn., Q. Bull.	Michigan Agricultural Experiment Station, Quarterly Bulletin (East Lansing, Mich.)
Mie Igaku	Mie Igaku (Tsu, Japan)
Mitt. Biol. Bundesanst. Land Forstwirtsch., Berlin-Dahlem	Mitteilungen aus der Biologischen Bundesanstalt fuer Land- und Forstwirtschaft, Berlin-Dahlem (Berlin, Germany)
Mod. Vet. Pract.	Modern Veterinary Practice (Santa Barbara, Calif.)
Muenchner Beitr. Abwasser Fisch. Flussbiol.	Muenchner Beitraege zur Abwasser Fischerei und Flussbiologie (Munich, Germany)
Mutat. Res.	Mutation Research (Amsterdam, Netherlands)
N. Dak. Farm Res.	North Dakota Farm Research (Fargo, N. Dak.)
N.Z. Dep. Sci. Ind. Res., Inf. Ser.	New Zealand Department of Scientific and Industrial Research, Information Series (Wellington, New Zealand)

N.Z. J. Agric.	New Zealand Journal of Agriculture (Wellington, New Zealand)
N.Z. J. Agric. Res.	New Zealand Journal of Agricultural Research (Wellington, New Zealand)
N.Z. Med. J.	New Zealand Medical Journal (Wellington, New Zealand)
Nachrichtenbl. Dtsch. Pflanzenschutzdienstes	Nachrichtenblatt des Deutschen Pflanzenschutzdienstes (Brunswick, Germany)
Nat. Pest Control Oper. News	National Pest Control Operators News (Woodland Hills, Calif.)
Nat. Wool Grower	National Wool Grower (Salt Lake City, Utah)
Natur. Hist.	Natural History (New York, N.Y.)
Nature	Nature - London (London, England)
Naturwissenschaften	Naturwissenschaften (Berlin, Germany)
Nauchn. Tr. Nauchno-Issled. Vet. Inst., Minsk	Nauchnye Trudy Nauchno-Issledovatel'skogo Veterinarnogo Instituta, Minsk (Minsk, USSR)
Naunyn-Schmiedebergs Arch. Pharmakol. Exp. Pathol.	Naunyn-Schmiedebergs Archiv fuer Pharmakologie und Experimentelle Pathologie (Berlin, Germany)
Neurology	Neurology (Minneapolis, Minn.)
New Sci.	New Scientist (London, England)
New Sci. Sci. J.	New Scientist and Science Journal (London, England)
Nippon Noson Igakkai Zasshi	Nippon Noson Igakkai Zasshi (Tokyo, Japan)
Nippon Saigai Igakkai Kaishi	Nippon Saigai Igakkai Kaishi (Tokyo, Japan)
Nord. Hyg. Tidsskr.	Nordisk Higienisk Tidsskrift (Stockholm, Sweden)
Nord. Vet. Med.	Nordisk Veterinaer Medicin (Copenhagen, Denmark)
Norsk Vet. Tidsskr.	Norsk Veterinaer-Tidsskrift (Oslo, Norway)
North Am. Vet.	North American Veterinarian (Santa Barbara, Calif.)
Noyaku Kensasho Hokoku	Noyaku Kensasho Hokoku (Tokyo, Japan)
Okla. Agric. Exp. Stn., Processed Ser.	Oklahoma Agricultural Experiment Station, Processed Series (Stillwater, Okla.)

Ophthalmologica	Ophthalmologica (Basel, Switzerland)
Org. Gard. Farming	Organic Gardening and Farming (Emmaus, Pa.)
Pa. Med.	Pennsylvania Medicine (Lemoyne, Pa.)
Pamiet. Pulawski	Pamietnik Pulawski (Warsaw, Poland)
PANS	Pest Articles and News Summaries (London, England)
Parasitica	Parasitica (Gembloix, Belgium)
Pest Control	Pest Control (Cleveland, Ohio)
Pestic. Abstr.	Pesticides Abstracts (Washington, D.C.)
Pestic. Chem. News	Pesticide Chemical News (Washington, D.C.)
Pestic. Monit. J.	Pesticides Monitoring Journal (Atlanta, Ga.)
Pesticides	Pesticides (Bombay, India)
Pflanzenschutzberichte	Pflanzenschutzberichte (Vienna, Austria)
Pfluegers Arch.	Pfluegers Archiv (Berlin, Germany)
Pharm. Weekbl.	Pharmaceutisch Weekblad (Amsterdam, Netherlands)
Pharmacol. Rev.	Pharmacological Reviews (New York, N.Y.)
Pharmacologist	Pharmacologist, The (Bethesda, Md.)
Physiol. Behav.	Physiology and Behaviour (Fayetteville, N.Y.)
Physiol. Psychol.	Physiological Psychology (Austin, Tex.)
Plant Dis. Rep.	Plant Disease Reporter (Washington, D.C.)
Pol. Arch. Hydrobiol.	Polskie Archiwum Hydrobiologii (Warsaw, Poland)
Pol. Tyg. Lek.	Polski Tygodnik Lekarski (Warsaw, Poland)
Poult. Sci.	Poultry Science (College Station, Tex.)
Prac. Lek.	Pracovni Lekarstvi (Prague, Czechoslovakia)
Proc. Aquat. Weed Control Soc.	Proceedings of the Aquatic Weed Control Society (Jackson, Mich.)
Proc. Br. Weed Control Conf.	Proceedings of the British Weed Control Conference (Droitwich, Worcestershire, England)

Proc. Calif. Weed Conf.	Proceedings of the California Weed Conference (Sacramento, Calif.)
Proc. Indiana Acad. Sci.	Proceedings of the Indiana Academy of Science (Indianapolis, Ind.)
Proc. Int. Congr. Nutr., 9th, 19th	Proceedings of the International Congress of Nutrition, 9th, 19th (Mexico City, Mexico)
Proc. Nat. Acad. Sci. U.S.A.	Proceedings of the National Academy of Sciences of the United States of America (Washington, D.C.)
Proc. North Cent. Weed Control Conf.	Proceedings of the North Central Weed Control Conference (Omaha, Nebr.)
Proc. Northeast. Weed Control Conf.	Proceedings of the Northeastern Weed Control Conference (Farmingdale, N.Y.)
Proc. Northeast. Weed Sci. Soc.	Proceedings of the Northeastern Weed Science Society (College Park, Md.)
Proc. Okla. Acad. Sci.	Proceedings of the Oklahoma Academy of Science (Stillwater, Okla.)
Proc. Pa. Acad. Sci.	Proceedings of the Pennsylvania Academy of Science (Easton, Pa.)
Proc. R. Soc. Med.	Proceedings of the Royal Society of Medicine (London, England)
Proc. Soc. Exp. Biol. Med.	Proceedings of the Society for Experimental Biology and Medicine (New York, N.Y.)
Proc. South. Weed Conf.	Proceedings of the Southern Weed Conference (St. Louis, Mo.)
Proc. South Weed Sci. Soc.	Proceedings of the Southern Weed Science Society (Athens, Ga.)
Proc. West. Soc. Weed Sci.	Proceedings of the Western Society of Weed Science (Logan, Utah)
Prog. Anal. Chem.	Progress in Analytical Chemistry (New York, N.Y.)
Prog. Fish Cult.	Progressive Fish and Culturist (Washington, D.C.)
Purdue Univ., Agric. Exp. Stn., Res. Bull.	Purdue University, Agricultural Experiment Station, Research Bulletin (Lafayette, Ind.)

Qual. Plant-Plant Foods Hum. Nutr.	Qualitative Plantarum-Plant Foods for Human Nutrition (The Hague, Netherlands)
R.I. Resour.	Rhode Island Resources (Kingston, R.I.)
Rangem. News	Rangeman's News (Denver, Colo.)
Rastit. Zasht.	Rastitelna Zashtita (Sofia, Bulgaria)
Recl. Med. Vet. Exot. Ecole Alf.	Recueil de Medecine Veterinaire Exotique de l'Ecole d'Alfort (Paris, France)
Research (London)	Research (London) (London, England)
Residue Rev.	Residue Reviews (New York, N.Y.)
Rev. For. Fr.	Revue Forestiere Francaise (Nancy, France)
Rocz. Glebozn.	Roczniki Gleboznawcze (Warsaw, Poland)
Rocz. Nauk Roln., Ser. H	Roczniki Nauk Rolniczych, Seria H (Warsaw, Poland)
Rocz. Panstw. Zakl. Hig.	Roczniki Panstwowego Zakladu Higieny (Warsaw, Poland)
S. Afr. Sugar J.	South African Sugar Journal, The (Durban, South Africa)
Sangyo Igaku	Sangyo Igaku (Tokyo, Japan)
Schriftenr. Ver. Wasser, Boden, Lufthyg., Berlin-Dahlem	Schriftenreihe des Vereins fuer Wasser-, Boden-, und Lufthygiene, Berlin-Dahlem (Berlin, Germany)
Sci. Biol. J.	Science of Biology Journal (St. Louis, Mo.)
Sci. Res.	Scientific Research (New York, N.Y.)
Sci. Total Environ.	Science of the Total Environment, The (Amsterdam, Netherlands)
Science	Science (Washington, D.C.)
Sogo Rinsho	Sogo Rinsho (Osaka, Japan)
South. Weed Control Conf.	Southern Weed Control Conference (Auburn, Ala.)
Sov. Med.	Sovetskaya Meditsina (Moscow, USSR)
Succes. Farm.	Successful Farming (Des Moines, Iowa)

Sud. Med. Ekspert.	Sudebno-Meditsinskaya Ekspertiza (Moscow, USSR)
Sven. Vet.	Svensk Veterinartidning (Stockholm, Sweden)
Swed. Weed Conf.	Swedish Weed Conference (Uppsala, Sweden)
Tansuiku Suisan Kenkyusho Kenkyu Hokoku	Tansuiku Suisan Kenkyusho Kenkyu Hokoku (Tokyo, Japan)
Teratology	Teratology (Philadelphia, Pa.)
Toxicology	Toxicology (Amsterdam, Netherlands)
Toxicol. Appl. Pharmacol.	Toxicology and Applied Pharmacology (New York, N.Y.)
Trans. Am. Fish. Soc.	Transactions of the American Fisheries Society (Washington, D.C.)
Trans. Ill. State Acad. Sci.	Transactions of the Illinois State Academy of Science (Springfield, Ill.)
Trans. R. Soc. S. Afr.	Transactions of the Royal Society of South Africa (Rondebosch, South Africa)
Trib. CEBEDEAU	Tribune du CEBEDEAU (Liege, Belgium)
Trop. Med.	Tropical Medicine (Nagasaki, Japan)
Tsitol. Genet.	Tsitologiya i Genetika (Kiev, USSR)
Ugeskr. Laeg.	Ugeskrift for Laeger (Copenhagen, Denmark)
Ukr. Biokhim. Zh.	Ukrains'kii Biokhimichnii Zhurnal (Kiev, USSR)
Umsch. Wiss. Tech.	Umschau in Wissenschaft und Technik (Frankfurt am Main, Germany)
U.S. Dep. Agric., Agric. Handb.	U.S. Department of Agriculture, Agriculture Handbook (Washington, D.C.)
U.S. Dep. Agric., Agric. Res. Serv., ARS	U.S. Department of Agriculture, Agricultural Research Service, ARS (Washington, D.C.)
U.S. Dep. Agric., Agric. Res. Serv., Admin. Let.	U.S. Department of Agriculture, Agricultural Research Service, Administrator's Letter (Washington, D.C.)
U.S. Dep. Agric., Farmers Bull.	U.S. Department of Agriculture, Farmers Bulletin (Washington, D.C.)

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Northwest For. Range Exp. Stn.,  
Res. Notes
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- U.S. Dep. Health Ed. Welf., Publ.  
Health Serv., Food Drug Admin.,  
Fact Sheet
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- U.S. Fish Wildl. Serv., Sp. Fish.  
Wildl. Res.
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- U.S. Public Health Serv. Publ.
- Var Foeda
- Vestn. Dermatol. Venerol.
- Vestsi Akad. Navuk B. SSR, Ser.  
Biyal. Navuk
- Vestsi Akad. Navuk B. SSR, Ser.  
Sel'skagaspad. Navuk
- Vet. Clin. N. Am.
- Vet. Rec.
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- Veterinariya-Moscow
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vice, Food and Drug Administration,  
Fact Sheet  
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Circular  
(Washington, D.C.)
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Sport Fishery and Wildlife Re-  
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(Springfield, Va.)
- U.S. Public Health Service Publi-  
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- Var Foeda  
(Stockholm, Sweden)
- Vestnik Dermatologii i Venerologii  
(Moscow, USSR)
- Vestsi Akademii Navuk Belaruskai  
SSR, Seryya Biyalagichnykh Navuk  
(Minsk, USSR)
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SSR, Seryya Sel'skagospadarchykh  
Navuk  
(Minsk, USSR)
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(Philadelphia, Pa.)
- Veterinary Record  
(London, England)
- Veterinariya-Kiev  
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(Moscow, USSR)
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(Moscow, USSR)

Vopr. Gig. Toksikol. Pestits., Tr.	Voprosy Gigieny i Toksikologii
Nauchn. Sess. Akad. Med. Nauk	Pestitsidov, Trudy Nauchnoi
SSSR	Sessii Akademii Meditsinskikh
	Nauk SSSR
	(Kishinev, USSR)
Vopr. Med. Khim.	Voprosy Meditsinskoi Khimii
	(Moscow, USSR)
Vopr. Pitan.	Voprosy Pitaniya
	(Moscow, USSR)
Vrach. Delo	Vrachebnoe Delo
	(Kiev, USSR)
Wall St. J.	Wall Street Journal
	(Silver Spring, Md.)
Wash. Agric. Exp. Stn., Bull.	Washington Agricultural Experiment
	Station, Bulletin
	(Pullman, Wash.)
Wash. Agric. Rec.	Washington Agricultural Record,
	The
	(Washington, D.C.)
Wasser Boden	Wasser und Boden
	(Hamburg, Germany)
Wasserwirtsch.-Wassertech.	Wasserwirtschaft-Wassertechnik
	(Berlin, Germany)
Water Res.	Water Research
	(Oxford, England)
Weed Abstr.	Weed Abstracts
	(Oxford, England)
Weed Sci.	Weed Science
	(Champaign, Ill.)
Weed Sci. Soc. Am., Abstr., Meet.	Weed Science Society of America,
	Abstracts, Meetings
	(Champaign, Ill.)
Weeds	Weeds
	(Champaign, Ill.)
Weeds Today	Weeds Today
	(Minneapolis, Minn.)
Work, Environ., Health	Work, Environment, Health
	(Helsinki, Finland)
Xenobiotica	Xenobiotica
	(London, England)
Z. Allgemeinmed.	Zeitschrift fuer Allgemeinmedizin
	der Landarzt
	(Stuttgart, Germany)
Z. Gesamte Hyg. Ihre Grenzgeb.	Zeitschrift fuer die Gesamte
	Hygiene und Ihre Grenzgebiete
	(Berlin, Germany)
Z. Jagdwiss.	Zeitschrift fuer Jagdwissenschaft
	(Hamburg, Germany)

Z. Pflanzenkr. Pflanzenschutz	Zeitschrift fuer Pflanzenkrankheiten und Pflanzenschutz (Stuttgart, Germany)
Zdravookhr. Beloruss.	Zdravookhranenie Belorussii (Minsk, USSR)
Zh. Eksp. Klin. Med.	Zhurnal Eksperimental'noi i Klinicheskoi Meditsiny (Yerevan, USSR)
Zhivotnovodstvo	Zhivotnovodstvo (Moscow, USSR)

Language Abbreviation

Bg - Bulgarian	Ja - Japanese
Cs - Czech	Nl - Dutch
Da - Danish	No - Norwegian
De - German	Pl - Polish
Es - Spanish	Pt - Portuguese
Fi - Finnish	Ru - Russian
Fr - French	Sk - Slovak ,
Hu - Hungarian	Sv - Swedish
It - Italian	

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*Triaenophorus nodulosus* - tapeworm ..... 337

c. Class *INSECTA*

*Acyrtosiphon pisum* - pea aphid ..... 653

*Apis mellifera* - honeybee ..... 335

*Drosophila melanogaster* - fruit fly ..... 317

d. Class *AVES*

*Anas platyrhynchos* - mallard duck ..... 225

*Colinus virginianus* - bobwhite quail ..... 225

*Gallus domesticus* - chicken (domestic) ..... 230, 247, 248,  
338

## MCPA - Effects on Reproduction (cont'd)

- Phasianus colchicus - ring-necked pheasant, pheasant ..... 225
- e. Class *MAMMALIA*
  - Cavia porcellus - guinea pig ..... 400
  - Mus musculus - mouse (house) ..... 488, 555
  - Oryctolagus cuniculus - rabbit ..... 555
  - Rattus norvegicus - rat ..... 261, 555
- 2. Cytogenic Effects
  - a. Class *INSECTA*
    - Drosophila melanogaster - fruit fly ..... 793
- 3. Other Anatomical and Physiological Effects
  - a. Class *NEMATODA*
    - Aerobeliodes butschlii ..... 847
    - Aphelenoides bicaudatus ..... 847
    - Chiloplacus symmetricus ..... 847
    - Ditylenchus dipsaci ..... 847
    - Eucephalobus elongatus ..... 847
    - Eucephalobus oxyuroides ..... 847
    - Eucephalobus striatus ..... 847
    - Eudorylaimus monohystera ..... 847
    - Eudorylaimus obtusicaudatus ..... 847
    - Mesodorylaimus mesonycticos ..... 847
    - Mylonchulus brachyuris ..... 847
    - Plectus granulosus ..... 847
    - Plectus parietinus ..... 847
    - Rhabditis juv ..... 847
    - Tylenchorhynchus dubius ..... 847
  - b. Class *GASTROPODA*
    - Lymnaea stagnalis - freshwater snail ..... 632
  - c. Class *OLIGOCHAETA*
    - Tubifex sp. ..... 632
  - d. Class *ARACHNIDA*
    - Oppia sp. ..... 208
    - Pergamasus suecius ..... 208
    - Puncitoribates punctum ..... 208
    - Pygmephorus gracilis ..... 208
    - Rhodacarellus silesiarus ..... 208
    - Tertorepheus velatus ..... 208
  - e. Class *CRUSTACEA*
    - Artemia salina ..... 228
    - Asellus aquaticus - sow bug ..... 632
    - Callinectes sapidus - blue crab ..... 160
    - Daphnia magna - water flea, daphnia ..... 198
    - Daphnia pulex - water flea ..... 632
    - Cammarus pulex - sand hopper ..... 632
  - f. Class *INSECTA*
    - Acyrthosiphon pisum - pea aphid ..... 653

MCPA - Other Anatomical and Physiological Effects (cont'd)

- Apis mellifera - honeybee ..... 316
  - Drosophila melanogaster - fruit fly ..... 317
  - g. Class *OSTEICHTHYES*
    - Cyprinus carpio - carp ..... 632, 679, 749
    - Esox lucius - northern pike, pike ..... 632
    - Fundulus similis - longnose killifish ..... 160, 162
    - Lepomis macrochirus - bluegill sunfish, bream ..... 214
    - Perca fluviatilis - perch ..... 632, 749
    - Phoxinus phoxinus ..... 632
    - Rasbora heteromorpha - harlequin fish ..... 13
  - h. Class *AMPHIBIA*
    - Bufo bufo japonicus - Japanese frog ..... 594
    - Rana temporaria - frog ..... 632
  - i. Class *AVES*
    - Anas platyrhynchos - mallard duck ..... 225, 738
    - Colinus virginianus - bobwhite quail ..... 225
    - Coturnix coturnix japonica - Japanese quail, quail ..... 225
    - Gallus domesticus - chicken (domestic) ..... 230, 609, 610
    - Phasianus colchicus - ring-necked pheasant, pheasant ..... 225, 738
  - j. Class *MAMMALIA*
    - Bos sp. - cattle ..... 204, 482, 609, 610, 619, 621, 638
    - Homo sapiens - human ..... 497, 612, 630, 756, 788, 789
    - Mus musculus - mouse (house) ..... 604
    - Oryctolagus cuniculus - rabbit ..... 339
    - Ovis aries - sheep ..... 482, 609, 610
    - Rattus norvegicus - rat ..... 76, 604, 638, 660, 790
4. Human Intoxication ..... 17, 108, 312, 413, 419, 421, 497, 612, 630, 756, 789
5. Other Human Health Aspects ..... 417, 421, 470, 504, 514, 515, 572, 786, 835, 837, 838, 839

F. MCPB {4-[*(4-chloro-o-tolyl)oxy*]butyric acid, (*4-(2-methyl-4-chlorophenoxy)butyric acid* )}

1. Effects on Reproduction

- a. Class *INSECTA*
  - Acyrthosiphon pisum - pea aphid ..... 653
- b. Class *AVES*
  - Gallus domesticus - chicken (domestic) ..... 247, 248

2. Other Anatomical and Physiological Effects

- a. Class *INSECTA*
  - Acyrthosiphon pisum - pea aphid ..... 653
- b. Class *OSTEICHTHYES*
  - Cyprinus carpio - carp ..... 679
- c. Class *AVES*
  - Gallus domesticus - chicken (domestic) ..... 610

MCPE - Other Anatomical and Physiological Effects (cont'd)

d. Class *MAMMALIA*

- Bos sp. - cattle ..... 610
- Cavia porcellus - guinea pig ..... 334
- Homo sapiens - human ..... 813
- Mus musculus - mouse (house) ..... 334
- Oryctolagus cuniculus - rabbit ..... 334
- Ovis aries - sheep ..... 610
- Rattus norvegicus - rat ..... 334- 590

3. Human Intoxication ..... 813

4. Other Human Health Aspects ..... 504

G. MCPEE (4-chloro-2-methylphenoxyacetic acid ethyl ester)

1. Effects on Reproduction

a. Class *MAMMALIA*

- Rattus norvegicus - rat ..... 854

H. Mecoprop {2-(4-chloro-2-methylphenoxy)propionic acid, 2-[*(4-chloro-o-tolyl)oxy*]propionic acid}

1. Effects on Reproduction

a. Class *INSECTA*

- Drosophila melanogaster - fruit fly ..... 317

b. Class *AVES*

- Gallus domesticus - chicken (domestic) ..... 247, 338

2. Other Anatomical and Physiological Effects

a. Class *INSECTA*

- Apis mellifera - honeybee ..... 253

- Drosophila melanogaster - fruit fly ..... 317

b. Class *MAMMALIA*

- Rattus norvegicus - rat ..... 790

3. Other Human Health Aspects ..... 468, 515, 689, 786

I. 2,4,5-T (2,4,5-trichlorophenoxy)acetic acid

1. Effects on Reproduction

a. Class *ROTIFERA*

- Brachionus angularis ..... 787

- Keratella americana ..... 787

- Keratella cochlearis ..... 787

b. Class *INSECTA*

- Acyrthosiphon pisum - pea aphid ..... 653

- Apis mellifera - honeybee ..... 546, 547, 558, 560

## 2,4,5-T - Effects on Reproduction (cont'd)

- Drosophila melanogaster - fruit fly .... 216, 217, 599
- Thrips tabaci - onion thrips .... 705
- c. Class AVES
  - Alectoris rufa - red-legged partridge, red partridge .... 498, 503
  - Coturnix coturnix japonica - Japanese quail, quail .... 226, 227, 368, 369, 498, 503
  - Gallus domesticus - chicken (domestic) .... 19, 226, 230, 338, 368, 435, 498, 502, 503, 719, 720, 722, 740, 823
  - Perdix perdix - gray partridge .... 498
  - Phasianus colchicus - ring-necked pheasant, pheasant .... 368, 498, 503
- d. Class MAMMALIA
  - Homo sapiens - human .... 229, 537, 673, 674
  - Macaca mulatta - Rhesus monkey .... 238, 239, 240
  - Mesocricetus auratus - Syrian hamster, golden hamster .... 155, 180, 181, 222, 303
  - Mus musculus - mouse (house) .... 102, 128, 191, 192, 193, 194, 222, 302, 353, 363, 364, 365, 366, 367, 394, 457, 490, 491, 554, 657, 758, 759
  - Oryctolagus cuniculus - rabbit .... 263, 761
  - Ovis aries - sheep .... 127
  - Rattus norvegicus - rat .... 128, 191, 192, 193, 255, 256, 262, 263, 301, 341, 342, 436, 437, 438, 444, 454, 455, 456, 457, 458, 539, 713, 714, 717, 725, 726, 727, 739, 761

2. Cytogenetic effects

- a. Class INSECTA
  - Drosophila melanogaster - fruit fly .... 513
- b. Class MAMMALIA
  - Homo sapiens - human .... 229, (in vitro) 298, 856
  - Meriones unguiculatus - mongolian gerbil .... 512
  - Mus musculus - mouse (house) .... 407
  - Rattus norvegicus - rat .... 255, 256, 744, 855

3. Carcinogenic Effects

- a. Class MAMMALIA
  - Homo sapiens - human .... 99, 100, 229
  - Mus musculus - mouse (house) .... 404, 570

4. Other Anatomical and Physiological Effects

- a. Class ROTIFERA
  - Brachionus angularis .... 787
  - Keratella americana .... 787
  - Keratella cochlearis .... 787
- b. Class NEMATODA
  - Belonolaimus gracilis - sting nematode .... 170

## 2,4,5-T - Other Anatomical and Physiological Effects (cont'd)

- c. Class *PELECYPODA*  
*Crassostrea virginica* - eastern oyster, common American  
 oyster ..... 160, 161, 162
- d. Class *CRUSTACEA*  
*Penaeus aztecus* - brown shrimp ..... 162
- e. Class *INSECTA*  
*Acyrthosiphon pisum* - pea aphid ..... 653  
*Apis mellifera* - honeybee ..... 118, 249, 257, 544, 545,  
 547, 557, 558, 559, 560  
*Cochliomyia hominivorax* - screwworm fly ..... 201  
*Ctenicera destructor* - screwworm ..... 213  
*Drosophila melanogaster* - fruit fly ..... 120  
*Onychiurus quadriocellatus* - springtail ..... 258
- f. Class *OSTEICHTHYES*  
*Cyprinus carpio* - carp ..... 749  
*Fundulus similis* - longnose killifish ..... 160  
*Gambusia affinis* - mosquito fish ..... 276  
*Lepomis macrochirus* - bluegill sunfish, bream ..... 214,  
 313, 374, 377, 378, 379, 380, 381, 383, 396  
*Lepomis punctatus* - spotted sunfish ..... 863  
*Mugil cephalus* - mullet ..... 162  
*Oncorhynchus kisutch* - coho salmon, silver salmon ..... 386  
*Perca fluviatilis* - perch ..... 749  
*Rasbora heteromorpha* - harlequin fish ..... 13  
*Salmo gairdneri* - rainbow trout ..... 215
- g. Class *AMPHIBIA*  
*Bufo americanus* - toad ..... 858, 859
- h. Class *REPTILIA*  
*Ankistrodon piscivorus* - cottonmouth water moccasin .....  
 858, 859  
*Cnemidophorus sexlineatus* - six-lined race runner ..... 858,  
 859, 861, 862
- i. Class *AVES*  
*Anas platyrhynchos* - mallard duck ..... 225, 313  
*Colinus virginianus* - bobwhite quail ..... 225, 313  
*Gallus domesticus* - chicken (domestic) ..... 19, 23, 79, 129,  
 230, 266, 330, 609, 610, 660, 740, 741, 824, 826  
*Meleagris gallopavo* - turkey (domestic) ..... 650, 651  
*Phasianus colchicus* - ring-necked pheasant, pheasant .....  
 225, 313
- j. Class *MAMMALIA*  
*Bos* sp. - cattle ..... 25, 73, 174, 320, 321, 330, 482, 485,  
 508, 608, 609, 610, 639, 660  
*Cavia porcellus* - guinea pig - 660  
*Canis familiaris* - dog ..... 244, 388, 389, 483, 660  
*Equus caballus* - horse ..... 330, 624  
*Homo sapiens* - human ..... 99, 100, 138, 229, 257, 423, 441,  
 442, 449, 495, 543, 561, 595, 614, 627, 628, 629, 645,  
 688, 789  
*Lepus timidus* - mountain hare ..... 272  
*Macaca mulatta* - Rhesus monkey ..... 238

## 2,4,5-T - Other Anatomical and Physiological Effects (cont'd)

- Mus musculus - mouse (house) .... 296, 297, 363, 366, 367, 524, 660, 739, 758, 806, (in vitro) 806  
 Oryctolagus cuniculus - rabbit .... 121, 122, 441, 660  
 Ovis aries - sheep .... 25, 174, 175, 320, 321, 330, 482, 608, 609, 610, 638  
 Peromyscus gossypinus - cotton mouse .... 858, 859  
 Peromyscus polionotus - beach mouse, old field mouse .... 858, 859, 861, 862  
 Rattus norvegicus - rat .... 5, 76, 121, 122, 129, 164, 168, 191, 241, 242, 255, 256, 266, 309, 313, 341, 342, 388, 437, 438, 460, 461, 462, 463, 464, 465, 466, 467, 539, 648, 649, 660, 675, 744  
 Reithrodontomys humulis - eastern harvest mouse .... 858, 859  
 Sigmodon hispidus - cotton rat, hispid cotton rat .... 858, 859  
 Sus scrofa - pig .... 25, 129, 265, 320, 321, 330
5. Human Intoxication .... 99, 133, 409, 423, 441, 442, 495, 537, 543, 561, 595, 614, 627, 628, 629, 630, 647, 673, 674, 688, 724, 755, 789, 856
6. Other Human Health Aspects .... 1, 2, 3, 4, 8, 9, 18, 20, 21, 22, 29, 30, 34, 35, 36, 37, 39, 40, 41, 43, 44, 46, 47, 48, 49, 50, 51, 52, 53, 56, 58, 60, 61, 64, 67, 68, 69, 74, 75, 77, 83, 84, 86, 88, 92, 94, 95, 97, 112, 113, 124, 125, 139, 142, 143, 148, 151, 154, 171, 179, 182, 206, 218, 231, 232, 234, 236, 237, 257, 270, 278, 281, 285, 291, 295, 305, 307, 308, 318, 328, 329, 333, 358, 361, 385, 393, 394, 399, 405, 414, 417, 426, 427, 429, 470, 477, 480, 492, 504, 509, 510, 511, 515, 520, 525, 528, 541, 550, 561, 562, 564, 567, 568, 577, 583, 585, 587, 596, 598, 600, 601, 603, 610, 613, 616, 635, 645, 661, 662, 674, 677, 681, 689, 702, 708, 732, 733, 734, 735, 737, 751, 755, 757, 769, 770, 774, 775, 776, 777, 778, 779, 781, 785, 786, 789, 791, 799, 805, 811, 815, 818, 819, 820, 821, 822, 827, 829, 835, 837, 838, 839, 841, 843, 846, 860, 871

## J. Erbon [2-(2,4,5-trichlorophenoxy)ethyl-2,2-dichloropropionate]

1. Effects on Reproduction

- a. Class INSECTA  
 Acyrthosiphon pisum - pea aphid .... 653

2. Other Anatomical and Physiological Effects

- a. Class INSECTA  
 Acyrthosiphon pisum - pea aphid .... 653

Erbon - Other Anatomical and Physiological Effects (cont'd)

- b. Class *MAMMALIA*  
*Ovis aeris* - sheep ..... 853

K. Silvex [2-(2,4,5-trichlorophenoxy)propionic acid]

1. Effects on Reproduction

- a. Class *INSECTA*  
*Acyrthosiphon pisum* - pea aphid ..... 653  
*Apis mellifera* - honeybee ..... 547, 558
- b. Class *OSTEICHTHYES*  
*Lepomis humilis* - pygmy sunfish, orange spotted sunfish ..... 833  
*Lepomis macrochirus* - bluegill sunfish, bream ..... 833
- c. Class *MAMMALIA*  
*Mus musculus* - mouse (house) ..... 554  
*Rattus norvegicus* - rat ..... 554

2. Other Anatomical and Physiological Effects

- a. Class *ARACHNIDA*  
*Neoseilus fallacis* ..... 654  
*Tetranychus urticae* - two-spotted spider mite ..... 654
- b. Class *CRUSTACEA*  
*Ascellus brevicaudus* - sow bug ..... 671  
*Cypridopsis vidua* - seed shrimp ..... 671  
*Daphnia* sp. ..... 620  
*Daphnia magna* - water flea, daphnia ..... 198, 671  
*Daphnia pulex* - water flea ..... 667  
*Gammarus fasciatus* - scud ..... 671  
*Orconectes nais* - crayfish ..... 671  
*Palaemonetes kadiakensis* - glass shrimp ..... 671  
*Penaeus aztecus* - brown shrimp ..... 162
- c. Class *INSECTA*  
*Acyrthosiphon pisum* - pea aphid ..... 653  
*Apis mellifera* - honeybee ..... 545, 547, 557, 559  
*Chrysops* sp. - horse fly ..... 350  
*Pteronarcys californica* - stonefly ..... 668
- d. Class *OSTEICHTHYES*  
*Campostoma anomalum* - stoneroller ..... 373  
*Carassius auratus* - goldfish ..... 403  
*Chaenobryttus gulosus* - warmouth ..... 831  
*Dorosoma cepedianum* - gizzard shad ..... 831  
*Enneacanthus gloriosus* - bluespotted sunfish ..... 403  
*Ictalurus melas* - black bullhead ..... 403  
*Leiostomus xanthurus* - spot ..... 162  
*Lepomis cyanellus* - green sunfish ..... 373, 392  
*Lepomis humilis* - pygmy sunfish, orange spotted sunfish ..... 189  
*Lepomis macrochirus* - bluegill sunfish, bream ..... 186, 260,  
 374, 375, 376, 377, 378, 379, 380, 381, 382, 392, 395, 396,  
 403, 671, 747, 831

## Silvex - Other Anatomical and Physiological Effects (cont'd)

- Lepomis magalotis - longear sunfish ..... 831
- Lepomis microlophus - redear sunfish, redear ..... 260, 831
- Micropterus salmoides - large mouth bass ..... 831
- Notropis atherinoides - Lake emerald shiner ..... 750
- Pimephales promelas - fathead minnow ..... 747
- Pomoxis nigromaculatus - black crappie ..... 831
- Rasbora heteromorpha - harlequin fish ..... 13
- Salmo gairdneri - rainbow trout ..... 186, 403
- e. Class *AMPHIBIA*
  - Bufo woodhousii fowleri - Fowler's toad ..... 670
  - Pseudacris triseriata - western chorus dog ..... 670
- f. Class *AVES*
  - Colinus virginianus - bobwhite quail ..... 738
  - Gallus domesticus - chicken (domestic) ..... 609, 660
- f. Class *MAMMALIA*
  - Bos sp. - cattle ..... 150, 482, 609, 639
  - Cavia porcellus - guinea pig ..... 660
  - Oryctolagus cuniculus - rabbit ..... 660
  - Ovis aries - sheep ..... 150, 482, 609, 639
  - Rattus norvegicus - rat ..... 5, 76, 660
- 3. Other Human Health Aspects ..... 278, 417, 587, 616, 753, 838
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